```
FILE 'REGISTRY' ENTERED AT 10:21:39 ON 25 MAY 2001
               E THIOTAURINE/CN
              1 S E3
L1
     FILE 'STNGUIDE' ENTERED AT 10:22:04 ON 25 MAY 2001
     FILE 'USPATFULL, HCAPLUS' ENTERED AT 10:22:47 ON 25 MAY 2001
             84 S THIOTAURINE OR 2937-54-4/RN OR ((AMINOETHANESULFONOTHIOIC
L2
OR
           5615 S 424/401/NCL OR 424/59/NCL OR 424/60/NCL OR 424/61/NCL OR
L3
424/
         304232 S COSMETIC? OR DERMATOLOGIC? OR LOTION OR CREAM OR CREME OR
L4
OIN
         952051 S ANTIOXIDANT OR OXIDATION
L5
L6
             22 S L2 AND L5
              7 S L6 AND L4
L7
              0 S L7 AND PY<1997
L8
              1 S L7 AND PY<1998
L9
              6 S L7 NOT L9
L10
L11
              3 S L10 AND PY<1999
L12
              3 S L10 NOT L11
              3 S L6 AND L3
L13
              0 S L13 NOT L7
L14
             15 S L6 NOT L7
L15
             13 S L15 AND PY<1997
L16
              2 S L15 NOT L16
L17
          31370 S CHEMILUMINESCENCE OR CHEMILUMINESCENT
L18
              2 S L2 AND L18
L19
             19 S ((AMINOETHYLSULFINIC OR AMINOETHYLSULPHINIC) (3A) ACID) OR
L20
ΑM
L21
             13 S L20 NOT L2
              0 S L21 AND L18
L22
              5 S L21 AND L5
L23
              1 S L23 AND L3
L24
             4 S L23 NOT L24
L25
```

1 S L25 AND L4

3 S L25 NOT L26

L26

L27

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L1
     ANSWER 1 OF 1 REGISTRY COPYRIGHT 2001 ACS
RN
     2937-54-4 REGISTRY
     Ethanesulfonothioic acid, 2-amino- (9CI) (CA INDEX NAME)
CN
OTHER CA INDEX NAMES:
CN
     Taurine, thio- (6CI, 7CI, 8CI)
OTHER NAMES:
CN
     Thiotaurine
FS
     3D CONCORD
     C2 H7 N O2 S2
MF
CI
     COM
LC
     STN Files:
                  BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CHEMLIST, EMBASE,
       MEDLINE, PROMT, TOXLIT, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources:
                     EINECS**
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{HS-} \\ \text{S-} \\ \text{CH}_2 - \text{CH}_2 - \text{NH}_2 \\ \parallel \\ \text{O} \end{array}$$

36 REFERENCES IN FILE CA (1967 TO DATE)

36 REFERENCES IN FILE CAPLUS (1967 TO DATE)

28 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

Ordered from STC 5/25/01

L11 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2001 ACS ACCESSION NUMBER: 1999:26105 HCAPLUS DOCUMENT NUMBER: 130:100335 TITLE: Development and application of sebum antioxidant thiotaurine for cosmetics AUTHOR(S): Kohno, Yoshiyuki CORPORATE SOURCE: Shiseido Basic Res. Cent., Shiseido Co., Ltd., Yokohama, 223-8553, Japan SOURCE: Fragrance J. (1998), 26(12), 9-14 CODEN: FUJAD7; ISSN: 0288-9803 PUBLISHER: Fureguransu Janaru Sha DOCUMENT TYPE: Journal; General Review LANGUAGE: Japanese A review with 10 refs., on moisturizing capacity, anti-oxidative effects, AB and stability of thiotaurine, and its usefulness as an ingredient for skin care products preventing sebum oxidn., skin troubles, and skin aging. TΙ Development and application of sebum antioxidant thiotaurine for cosmetics Fragrance J. (1998), 26(12), 9-14 SO CODEN: FUJAD7; ISSN: 0288-9803 AΒ A review with 10 refs., on moisturizing capacity, anti-oxidative effects, and stability of thiotaurine, and its usefulness as an ingredient for skin care products preventing sebum oxidn., skin troubles, and skin aging. ST review thiotaurine sebum antioxidant cosmetic ΙT Antiaging cosmetics Antioxidants Sebum Skin conditioners (development and application of sebum antioxidant thiotaurine for cosmetics) IΤ Skin (oxidn. in; development and application of sebum

antioxidant thiotaurine for cosmetics)

2937-54-4, Thiotaurine IT

RL: BAC (Biological activity or effector, except adverse); BUU (Biological

use, unclassified); BIOL (Biological study); USES (Uses) (development and application of sebum antioxidant thiotaurine for cosmetics)

L17 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2001 ACS AGCESSION NUMBER: 1997:548253 HCAPLUS

DOCUMENT NUMBER:

127:216249

TITLE:

Cigarette smoke induced lipid peroxidation and its

oxidative effect on the skin

AUTHOR(S):

Egawa, Mariko; Yamashita, Toyonobu; Kohno, Yoshiyuki;

Sakamoto, Tetsuo; Ito, Kenzo; Kumano, Yoshimaru

CORPORATE SOURCE:

Shiseido Res. Cent., Yokohama-shi, Japan

SOURCE:

Sci. Conf. Asian Soc. Cosmet. Sci., 3rd (1997), 271-278. Asian Societies of Cosmetic Scientists:

Taichung, Taiwan. CODEN: 64XSAZ Conference

DOCUMENT TYPE:

English

LANGUAGE: CLASSIFICATION:

4-7 (Toxicology)

ABSTRACT:

The oxidative effects of cigarette smoke on the human skin were investigated. Using a GL-HPLC (HPLC with a chemiluminescence detector) system, a remarkable increase in the conversion ratio of squalene (SQ) to squalene hydroperoxide (SQHPO) due to exposure to cigarette smoke was obsd. This showed that cigarette smoke caused lipid peroxidn. However the authors found that the addn. of chain-breaking-type antioxidants, such as dl-.alpha.-tocopherol and tannin, inhibited the peroxidn. When cultured human fibroblasts were exposed to cigarette smoke, this increased the intensity of ultraweak chemiluminescence (CL), leading us to assume that cigarette smoke caused peroxidn. in cultured human fibroblasts. When the cultured human fibroblasts were treated with antioxidants, there was little increase in CL, meaning that peroxidn. had been prevented in the fibroblasts. The authors also exposed the human forehead and inside of the forearm to cigarette smoke and obtained sebum using cotton immersed in acetone in order to measure

dose-dependent increase in peroxides. Exposing the forearm to cigarette smoke increased the chemiluminescence and pretreating the skin with ***antioxidants*** inhibited this increase, thus peroxidn. was prevented. From this, the authors concluded that cigarette smoke had an oxidative effect on SQ, cultured human fibroblasts and the surface of the human skin. The authors found that the application of antioxidants prevented the cigarette smoke-induced oxidn. The authors consider that these oxidative effects on the skin can be a cause of skin disorders and skin aging, for example wrinkling.

peroxide levels by means of a CL-HPLC system. The cigarette smoke caused a

SUPPL. TERM:

cigarette smoke lipid peroxidn skin; oxidative stress

tobacco smoke skin lipoperoxidn

INDEX TERM:

Antioxidants Fibroblast

Lipid peroxidation

Oxidative stress (biological)

Sebum Skin

Tobacco smoke

(cigarette smoke induced lipid peroxidn. and its

oxidative effect on human skin)

INDEX TERM:

Tannins

ROLE: BAC (Biological activity or effector, except

adverse);

BPR (Biological process); BIOL (Biological study); PROC
(Process)

(cigarette smoke induced lipid peroxidn. and its

oxidative effect on human skin)

INDEX TERM:

Arm

(forearm; cigarette smoke induced lipid peroxidn. and

its

oxidative effect on human skin)

INDEX TERM:

Head

(forehead; cigarette smoke induced lipid peroxidn. and

its oxidative effect on human skin)

INDEX TERM:

50-81-7, Ascorbic acid, biological studies 59-02-9, alpha.-Tocopherol 68-94-0, Hypoxanthine 70-18-8,

Glutathione, biological studies 2937-54-4,

Thiotaurine

ROLE: BAC (Biological activity or effector, except

adverse);

BPR (Biological process); BIOL (Biological study); PROC

(Process)

(cigarette smoke induced lipid peroxidn. and its

oxidative effect on human skin)